

## Infrastructural Gap in India: The Pension Fund Option

*Ms. Pooja Jain,*

Research Scholar,  
IMS-DAVV, Indore, India.

*Dr. Prashant Gupta,*

Professor, Jaipuriya Institute of  
Management, Jaipur, India

### ABSTRACT

*The contribution of infrastructural development in global markets is widely accepted scenario and understood among the policy makers. As there has been a plethora of several technical as well as anecdotal evidences supporting that infrastructural growth having a direct relationship with that of a nation's economy. India has been constantly under the verge of being dwindled in the global economy, especially due to the infrastructural gaps which appears to be one of persisting problems for several decades.*

*Pension Funds are acting as a suitable option for investment of Infrastructure as some of the investors are actively pursuing for wider opportunities in sectors. Several countries have adopted and are under different stages of evolution in pension fund investment under Infrastructure. This paper discusses on the existing infrastructural gaps in India and how Pension Funds could facilitate in bridging these gaps to a considerable extent.*

**Keywords:** Global Economy, Infrastructure gaps, Investment, Pension Funds, PPP.

### INTRODUCTION:

Infrastructure projects never ceases to an end as it continues towards ensuring in delivering the services and goods which eventually aids in growth and prosperity contributing for the livelihood, social welfare, citizen's safety, health and for building a sustainable environment.

Prior to the advent of financial crisis there existed a fierce competition on the operational and financial investors due to the availability of cheap debt that has resulted in appreciation of asset values on Infrastructure development. The resultant credit quality under Infrastructure deals has been considerably subjected under deterioration. Due to the intrusion of financial crisis there has been certain projects were subjected to series of issues. As some investors who are seeking for stable returns through investing in Infrastructure funds has finally ended up with exposure to the volatile nature of heavily levied prices and overleveraged assets which resulted in originating a differential risk profile compared to the expected benefits from the investments (Nagaraj, 2003).

In the recent times have witnessed a much greater significance on financing Infrastructural projects through provision of several investment options like Infrastructure funds and private equity as these approaches are majorly targeting towards the equity markets as these new options have been serving as an alternative forms of asset classes for the fixed income and rendering as the new investment vehicles for representing an alternative form of asset classes for traditional equity as well as fixed income thereby facilitating in the broader spectrum of mid and smaller Pension Funds towards investment.

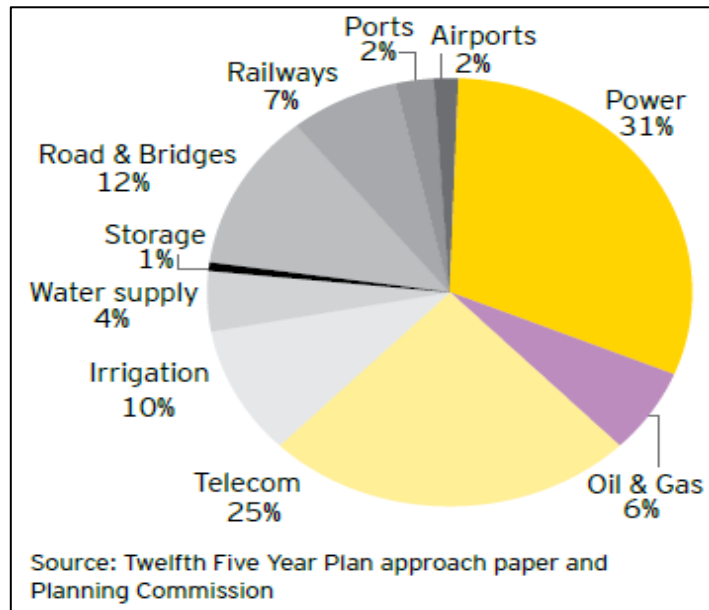
Pensions could invest under publically listed funds of equity trading on stock exchanges. Though, the main interests for the investors in the recent times have been towards unlisted funds. There are vast numbers of debt funds have also acted in raising the money over the last years. With the further consequences on the crisis resulted in disappearances of certain significant actors who are active under the Infrastructure markets like project finance banks and in the case of capital markets via monoline insurers.

However, financial crisis also has provided the investors in highlighting the underlying risks under Infrastructure as it provided opportunity for asset classes in maturity and in terms of developing the experiences for investment teams as well as the investors via assuring in the more realistic risks and the expectations return.

In a global scale, Pension Funds are growing at broader range on diversification of portfolios as a result of low correlation on Infrastructure in traditional asset classes. As the listed Infrastructure has moved in line for broader marketing trends as it commonly held a world view on investing under the unlisted Infrastructure projects even though it could be beneficial for ensuring in proper diversification of investment. The long-term investment has drastically shifted under Pension Funds as the other institutional investors have made natural investors less liquid for long-term assets like Infrastructure. However, the opportunities under the Infrastructure funds are restricted as it offered attractive characteristic on Pension Funds that are viewed under.

The Infrastructure investment has covered a wider range of project types under various sectors thereby launching investment characteristics. Depending on the degree of risk/return, the portfolio under investment on the Infrastructure portfolio under largest Pension Funds are often divided into different sections, such as the core where the cash yield serving as the dominant portion for the return and value added/opportunistic as the capital appreciation serves the dominant portion of pension returns. In some Pension Funds which are mostly bigger with more sophisticate investors who are investing at the riskier portion of the spectrum. This paper studies the various intermeddling factors that are contributing in Infrastructure gaps that presently stagnates the current investment approaches for Infrastructure projects in a full-fledged manner.

**Figure 1. Infrastructure spending in different sectors**



**CURRENT TRENDS ON INFRASTRUCTURAL INVESTMENT AND PENSION FUNDS: INDIAN CONTEXT:**

Regardless of the elevated growth rates, the country has witnessed in the recent decades that India has been still under the verge of suffering from the significant gaps under the supply on essential economic and social services pertaining under Infrastructure projects. Some of the essential infrastructural developments starting from water, roads, power and ports are urgently needed for the growing demands of population and to close the technological advancement the western society has been consistently meeting up.

**Table 1: Infrastructure in India**

COUNTRY	POP. (Millions)	AREA (m <sup>2</sup> )	STOCK OF INFRASTRUCTURE				
			Telecom (Millions)	Electricity (MW)	Rail (Km)	Roads (Km)	Airport
Brazil	198.74	8,514,877	191.78	43.88	28,857	1,751,868	4000
India	1166.08	3287,263	464.84	76.17	63,327	3,316,425	349
Nigeria	149.23	923,768	64.27	2.19	3,505	193,200	56

Source: Sansui and Governor, 2012

The government has taken active measures towards promoting PPPs expansion specially towards financing the public sectors via allocations from government budgetary and from internal resources. Among the successful institutional initiatives launched by government for PPP is the initiation of Infrastructure Development Finance Company of India (IDFC) which is completely owned under the government. The company has played a prominent role ever since the establishment for nearly two decades by providing funds via long-term capital investment for financing PPPs (Mahalingam, 2009).

IDFC in turn borrows the money which is guaranteed by Government of India through major multinational organizations and firms that lends for directly investing on Infrastructure projects or in certain cases via refinancing under long-term debt. Over 20% of the actual project cost could lend by certain conditions. The majority of the funds allocated under the Infrastructure fund were found to be covered for the construction of national highways, as it constituted greater contribution from the private sectors thus creating the majority of the telecom towers and wireless subscriber base comprising more than half of the cargo capacity addition in Indian ports, creating. Through the investment on Infrastructure projects has facilitated in creating over half of India's hydro and thermal generation capacity.

Opportunities under Infrastructure segment have resulted in many domestic as well as foreign institutions towards setting up Infrastructure funds. Such funds in turn has typically provided equity and debts through financing with exposure to a corporate level or even at the project levels. India Infrastructure Finance Initiative (IIFI) created under Citigroup, Blackstone, India Infrastructure Finance Company Limited (IIFCL) and Infrastructure Development Finance Company (IDFC) with a corpus of over \$ 5 billion (Akintoye and Hardcastle, 2008).

The funds which were deployed under \$ 2 billion in equity as well as \$ 3 billion for long-term debt financing, with the overall maturities exceeding over 10 years. IIFI funds were launched by State Bank of India with corpus over \$ 1 billion. Life Insurance Corporation and IDBI Limited also have formed a strategic alliance for funding Infrastructure projects via take-out and joint financing in long gestation projects.

Asides the equity as well as banking credits, bonds also acted as sources for financing of Infrastructure projects. Apart from equity and bank credit, the Pension Funds also have started to emerge as an essential source for Infrastructure finance. In India, insurance and Pension Funds have greatly achieved its own terms of aiding as an effective source for the insurance companies over investing on Infrastructure funds for rating constraint. In case of public sectors such as Rural Electrification Corporation (REC) and National Highways Authority of India (NHAI) has allowed for issuing tax-free bonds, during the period of 2006-07, as the NHAI issued bonds with a net worth of Rs 35 billion. REC received the government's approval for issuing bonds which also were in similar ranges of over Rs 35 billion which were dedicated funds for supplying of power for villages for the next three years. This however requires to be carried out by developing corporate bond markets thus channelizing the Pension Funds, to be dedicated for long-term Infrastructure projects (Lakhmani and Sikroria, 2012).

### **INFRASTRUCTURE GAPS: UNDERLYING CONCERNS:**

The Infrastructure gaps are greatly witnessed in non-OECD countries like India, China, Brazil and even in some of the OECD countries as well. Under a great extent, the major pitfalls behind the economic growth as the general underinvestment over the past as well as the newer challenges pertaining to the environmental issues like climatic changes. It has been estimated from the OECD report that actual estimate of the Infrastructure requirement was around US\$ 50 trillion by 2030. From the observed reports of The International Energy Agency has determined that by mitigation and adaptation on the effects of climatic changes by 2050 requires lump sum investment which exceed over USD 45 trillion. This clearly depicts that the necessity of such mountainous range of amount could not be expected to meet with traditional sources of public financing alone (Corce, 2011).

The financial crisis has impacted in creating an exacerbation over the present situation which has greatly reduced the scope on public investment of Infrastructure by government budgetary. This has clearly showcased that there has been a broader scope of recognition on significant gap on the Infrastructure development thus there is need for greater necessity of resourcing on the financing of private sector. This consequently has created further issues fading away some of the significant actors who are actively participating in Infrastructure markets. It has been obliged by many researchers that the intrusion of Institutional investors like insurance companies, mutual funds and pension schemes have been subjected to act as a potential player as it serves actively in bridging the Infrastructure gaps. Globally it was admitted that the institutional investors can act as key sources on capital finance under long term as the productive activities that assists in sustainable growth like green

energy as well as Infrastructure projects.

### **BARRIERS IN INFRASTRUCTURE GAPS:**

India is still under the adolescent stage as the Pension Funds are currently still not investing in a full-fledged manner. There are numerous hurdles that require major overcoming prior to Infrastructure becoming a primary interest. For attracting the pension fund on Infrastructure investment for guaranteeing the sustainability and success on investment under longer terms that needs to pinpoint some of the major barriers under investment which requires to be addressed specifically under Pension Funds in affecting the investors on a general note.

Investment on Infrastructure has offered various characteristics from asset classes which represents barriers over entrance to potential investors. Due to high up-front cost, absence of liquidity and long-term asset life of Infrastructure projects in actuality needs significant scale of investment followed by provision of dedicated resources for determining the underlying risks involved. Due to the unavailability of resources from investors side, acts as the major limiting factor.

These characteristics are collectively implying over the fact that investment on Infrastructure includes the following factors such as: minimal commitment over the political intrusion of Infrastructure investment under longer term; instability in the regulatory management of Infrastructure; breaking down of the markets into fragments among various sections of governments. As there is a lack in the clarity of investment opportunities and higher bidding costs that are involved under procurement process in Infrastructure projects and the investment opportunities within the markets are perceived to be quite risky. Under the investor's capability, it was observed that due to the lack of expertise under the Infrastructure sectors has been one of the prominent issues, followed by problems under the scaling up of pension fund investment. As there is also mis-alignment in the interest with respect to the Pension Funds with that of the Infrastructure funds; also, the investors try to invest under the short terms on Infrastructure projects makes it quite prone for expecting a long-term benefit under the investment options on Infrastructure. Under the conditions of investment on Infrastructure options there exists a negative perception on Infrastructure value, lack in transparency under the Infrastructure projects and also due to the shortage of data regarding the Infrastructure projects and absence of benchmark has created a sense of distrust among the investors (Inderst, 2009).

### **INTERVENTIONAL APPROACHES TO TACKLE THE UNDERLYING INFRASTRUCTURE GAPS VIA PENSION FUNDS:**

In recent time, it is very much acknowledged that the transparency and the quality of corporate governance structure have improved to a greater extent. The Infrastructure sector is not taking efforts towards focusing on policy and policy discussion pertaining with inclusive and sustainable development of infrastructural projects which takes inconsideration on affordable housing, change in the climatic impacts and management of natural resources has been undertaken by the public sector Infrastructure companies on a greater extent. In the recent decade the private sector has become the key financier over rendering and building up the investment plans. The government has also taken steps in incorporating Infrastructure investment to the next stage. Major decisions were implemented by GOI over improving the investment options on Infrastructure investment to be raised up to GDP constituting over 9% and the investment from the private sector has been greatly improved as the projected rise in their overall investment on Infrastructure was 30 % by the final part of 11<sup>th</sup> Five-year plan between 2007-12. Subsequently the 12<sup>th</sup> Five-year plan has shown that the estimates from Indian Planning Commission has shown that for achieving GDP growth on 9 % required gross capital formation of over 38.7% GDP and the growth in Infrastructure investment requires about US\$1 trillion for the five-year period. This clearly represents that there is necessity for adopting traditional investment options such as pension schemes for Infrastructure projects (OECD 2011c).

Similar to the majority of the developing countries, India has embarked on the model of including the participation of private sector. The government recognized long before that the public savings are quite insufficient for the fund's infrastructural needs as there is a limited implementation capacity. Under the broader masses of Pension Funds are much more interested in promoting lower risks on the investment options as it provides a steady, and a well-adjusted income stream which in particular the solvency regulation required a much conservative approach over investment on Pension Funds. Assets on Pension Funds could therefore expect towards directing more on the Infrastructure projects and also in bridging the Infrastructure gaps to a greater extent.

Moving forward, it is pretty much needed in the coming years as there is steady and sustained investment

options in Infrastructure projects. The challenging issues in finding ways and means for framing a long-term strategy and securing under long term financial sources and shielding it as effectively possible in exigencies under short term. Especially the institutional investors under Pension Funds play a crucial role towards financing under longer terms as the productive activities aids in sustainable growth for Infrastructure related projects (Yemmo and Severinson, 2010).

### **CONCLUSION:**

Despite the current financial crisis that has affected the future prospects and growth for institutional investors seems to be unabated with regards to the participation of private pensions as well as the insurance markets are quite small in comparison to the size of the macro economy of the country as a whole. Over the years, India has been constantly facing better opportunities towards developing the institutional investors sectors with certain exceptions on the financial systems which are primarily based on the banking firms. Under such scenario, it depends on certain key policy decisions like establishing national pension system as a funded component. Besides that, the current perception under long-term investment environment required transformational changes especially under the behavior of investors, thus creating new investment culture. The market in its very nature is unlikely towards delivering such kind of changes. The stakeholders who are being involved within the Infrastructure funds must recognize their chances of attaining mutual benefits under the sustainable proposition in Infrastructure by working together with a common goal.

### **REFERENCES:**

- Akintoye, A., Beck, M., & Hardcastle, C. (Eds.). (2008). Public-private partnerships: managing risks and opportunities.
- Della Croce, R., C. Kaminker and F. Stewart (2011). *The Role of Pension Funds in Financing Green Growth Initiatives*, OECD Publishing, Paris.
- Henisz, W. J. (2002). The institutional environment for Infrastructure investment. *Industrial and corporate change*, 11(2), 355-389.
- Lakhmani, P., & Sikroria, R. (2012). Infrastructure Financing Instruments with a Special Emphasis on Highways and Roads. *International Journal of Management Research and Reviews*, 2(9), 1668.
- Mahalingam, A. (2009). PPP experiences in Indian cities: barriers, enablers, and the way forward. *Journal of Construction Engineering and Management*, 136(4), 419-429.
- Nagaraj, R. (2003). Foreign direct investment in India in the 1990s: Trends and issues. *Economic and political weekly*, 1701-1712.
- Sanusi, S. L., (2012, July). *The Role of Development Finance Institutions in Infrastructure Development: What Nigeria Can Learn from BNDES and the Indian Infrastructure Finance*. In 3rd ICRC PPP Stakeholders Forum, Lagos, Nigeria, (Vol. 18).
- Yermo, J. and C. Severinson (2010). *The Impact of the Financial Crisis on Defined Benefit Plans and the Need for Counter-Cyclical Funding Regulations*, OECD Working Papers on Finance, Insurance and Private Pensions.

---